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Source: Memoirs of the American Academy in Rome, Vol. 48 (2003), pp. 45-51

Published by: University of Michigan Press for the American Academy in Rome

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## GALEN, HIS BOOKS, AND THE HORREA PIPERATARIA AT ROME

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In a passage familiar to both library historians and topographers of Rome, the physician Galen explains that he is writing a new version of his work *De compositione medicamentorum* per genera (On the Composition of Medications by Type) because his original copy of the first two books had been destroyed in a fire:

Ήδη μοι καὶ πρόσθεν ἐγέγραπτο πραγματεία, δυοῖν μὲν ἐξ αὐτῆς τῶν πρώτων βιβλίων ἐκδοθέντων, ἐγκαταλειφθέντων δὲ ἐν τῆ κατὰ τὴν ἱερὰν ὁδὸν ἀποθήκη μετὰ τῶν ἄλλων, ἡνίκα τὸ τῆς Εἰρήνης τέμενος όλον ἐκαύθη, καὶ κατὰ τὸ παλάτιον αἱ μεγάλαι βιβλιοθῆκαι. τηνικαῦτα γὰρ ἐτέρων τε πολλῶν ἀπώλοντο βιβλία καὶ τῶν ἐμῶν ὀσα κατὰ τὴν ἀποθήκην ἐκείνην ἐκείτο.

I have already written a treatise (on this topic), and the first two books of it had been circulated, but they were kept along with others in the storeroom  $(\dot{\alpha}\pi o\theta \dot{\eta}\kappa \eta)$  on the Sacra Via when the whole Temple of Peace was burned, and the great libraries (βιβλιοθ $\dot{\eta}\kappa\alpha\iota$ ) on the Palatine. The books of many others too were destroyed at that time, and all of mine that were in that storeroom.<sup>1</sup>

We know from two anecdotes of Aulus Gellius that there was a library in the Temple of Peace.<sup>2</sup> Since Galen says his work was burned in the fire that destroyed the Temple of Peace,<sup>3</sup> and since it is perfectly reasonable to assume that books would be kept in a library, scholars have often thought that the books Galen mentions in *De compositione medicamentorum per genera* formed part of the collection of the library in the Temple of Peace.<sup>4</sup> This assumption has led to

<sup>1</sup> Galen, *De comp. med. per gen.* 1.1 (13.362 Kühn). Readers may wish to know that Kühn is available online at http://www.bium.univ-paris5.fr/histmed/medica.htm. All translations are my own, and all dates are A.D. I wish to thank Peter M. Smith and Ann Ellis Hanson for reading earlier drafts of this article and making numerous helpful suggestions. I am grateful also to the anonymous referee for *MAAR* for very useful comments.

<sup>2</sup> Gell. NA 5.21.9 and 16.8.2. The dramatic dates, dates of composition, and dates of publication of these essays cannot be established with any certainty, although the second essay (16.8.2) seems to refer to a time when Gellius was a student, perhaps in the 140s or early 150s. See Holford-Strevens 1988, 9–19 for a review of the evidence on dating Gellius's works and for a suggestion that the publication date was after, and perhaps well after, 160. For our purposes, it is enough that Gellius proves

the existence of the library in the mid-second century. On the history and name of the Temple of Peace (not Forum Pacis until later), see Coarelli 1999, 67–70. I will throughout use Templum Pacis or Temple of Peace to mean the entire complex of open space and surrounding structures, not just the *aedes*.

<sup>3</sup> The date of this fire cannot be determined with certainty. It is described in Cass. Dio 72.24.1–2 and in Herodian 1.14.2, both of whom put it not long before the death of Commodus. Since Commodus died on 31 December 192, the year 192 seems most likely for the fire, but 191 cannot be excluded. For a full discussion of the date, see Daguet-Gagey 1997, 50–55. I follow her in dating the fire in 192.

<sup>4</sup> See, for example, Langie 1908, 69; Vleeschauwer 1964, 115 with n. 77; Anderson 1984, 115 n. 51; Blanck 1992, 195–196; Coarelli 1999, 68. Langie, Vleeschauwer, and

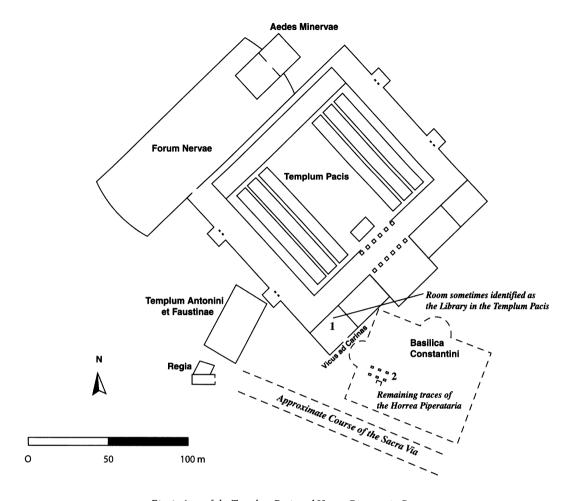


Fig. 1. Area of the Templum Pacis and Horrea Piperataria, Rome
(plan of the Templum Pacis adapted from Meneghini 2000, fig. 68; other features from Lugli 1947, pl. 1).
The Horrea Piperataria occupied roughly the area of the later Basilica Constantini, which is indicated in dotted lines. As shown here, traces of the Horrea were found under the floor of the Basilica (Minoprio 1932, pl. 1). Drawing Margaret M. Reid.

further inferences. First, Galen says his books were in a collection near the Sacra Via, so some scholars have argued that the Templum Pacis library, or more specifically the Greek section of it, must have been near the Sacra Via.<sup>5</sup> And second, we know of an interior space, within the Templum Pacis precinct and near the Sacra Via, that burned in the fire of 192. This is the hall or halls that later became the Church of Saints Cosmas and Damian (1 on fig. 1). The hall was rebuilt under the Severans, and the late version of the hall included nine rectangular wall niches that resemble the wall niches in known libraries.<sup>6</sup> Given the location

Coarelli do not discuss Galen's books explicitly, but all take Galen's statement about his books as evidence for the burning of the library (not just the Templum).

which are difficult to interpret, see Whitehead 1927, 13–17 and Castagnoli and Cozza 1956–1958, 139–141. The latter report (141) that of the earlier building only the great tufa wall along the Vicus ad Carinas survived the fire.

The wall niches are described by Castagnoli and Cozza 1956–1958, 139. For wall niches in Roman-era libraries, see Pfeiffer 1931, 162 (Timgad), Sève 1990, 177–178 (summary of dimensions of known niches), and Packer

<sup>&</sup>lt;sup>5</sup> Castagnoli and Cozza 1956–1958, 141; Anderson 1984, 115 n. 51; Blanck 1992, 196.

<sup>&</sup>lt;sup>6</sup> The rebuilding is probably to be dated under Septimius Severus. For the archaeological remains,

of the hall and the presence of such niches, some scholars have argued that this room was the library in the Templum Pacis and that it was precisely here that Galen's books were being stored when they were burned.<sup>7</sup>

Recently, however, Ann Ellis Hanson has pointed out that in *De comp. med. per gen.* 1.1 Galen never says that his books were in a library at all.<sup>8</sup> Instead, he tells us they were in an  $\dot{\alpha}\pi o\theta \dot{\eta}\kappa \eta$  on the Sacra Via, and an  $\dot{\alpha}\pi o\theta \dot{\eta}\kappa \eta$  is not a βιβλιοθήκη. Hanson reasonably suggested that Galen here meant a "private depository," and she pointed out another passage in which Galen refers to what must be this same  $\dot{\alpha}\pi o\theta \dot{\eta}\kappa \eta$ :

Λαβών δ' όσον έβουλόμην έξ αὐτοῦ, καθάπερ εἰώθειν, ἀπεθέμην ὀλίγα παρ' ἐμαυτῷ κλώνια κατὰ τὴν ἀποθήκην, ἐν ἦ πάντα μου τὰ τιμαλφέστατα κτήματα περιείχετο. κατακαυθείσης δ' αὐτῆς, ὁπότε καὶ τὸ τῆς Εἰρήνης τέμενος ἐκαύθη, καὶ τῶν ἄλλων πέντε διαφορῶν τοῦ κινναμώμου πᾶν ὀσον ἐκεκτήμην ἀπώλετο.

Taking as much cinnamon from it as I wished, as I always did, I stored a few stalks at my place in the storeroom  $(\dot{\alpha}\pi o\theta \dot{\eta} \kappa \eta)$  in which were kept all of my most precious possessions. When this was destroyed by fire, when the Templum Pacis also was burned, every bit of the other five qualities of cinnamon I had acquired was also destroyed.

Galen, that is, seems to have stored books, cinnamon, and other precious possessions together in one place, in a kind of "private safety deposit box," and all of these items were destroyed together when the  $\dot{\alpha}\pi o\theta \dot{\eta}\kappa \eta$  in which he kept them was burned in 192. Now this  $\dot{\alpha}\pi o\theta \dot{\eta}\kappa \eta$  clearly cannot have been in a library: one would not store cinnamon in a library. Thus there is no reason to assume that Galen's books were in the library of the Temple of Peace when it burned in 192, and we cannot use Galen's anecdote as evidence for the location of the library. All of this follows from Hanson's observations. But can we go further? Can we identify the specific  $\dot{\alpha}\pi o\theta \dot{\eta}\kappa \eta$ , not just move it, along with Galen's books, out of the Templum Pacis?

An ἀποθήκη, of course, is a storeroom, both generally in Greek and specifically in Galen. Galen twice refers to warm rooms for the storage of wine as ἀποθῆκαι. <sup>11</sup> At *De antid*. 1.4 (14.26 Kühn) in a discussion of honey and its qualities, Galen tells us that there is a large store of Hymettan honey in the "imperial ἀποθήκη" and that he had chosen some that was sweet and some that was sharp. Similarly, in preparing theriac (an all-purpose antidote) for Marcus Aurelius, Galen was looking for high-quality cinnamon and checked many wooden containers that had been stored at various times in what he calls ἀποθῆκαι. <sup>12</sup> And Galen can

seem to refer to the "whole cinnamon tree"  $(\delta \acute{\epsilon} \nu \delta \rho o \nu \ \acute{o} \lambda o \nu)$  mentioned at 14.64 Kühn, line 14. Thus it would appear that Galen had access to a considerable supply of cinnamon, presumably the emperor's, and that he took what he needed of it, but that which he took was destroyed in the fire of 192.

<sup>1997, 453–454 (</sup>Forum of Trajan in Rome). The niches in the hall of Cosmas and Damian are on the northwest, northeast, and southeast walls of the room marked 1 on figure 1.

<sup>&</sup>lt;sup>7</sup> Langie 1908, 67–68 and 70 (writing before the Church had been studied systematically), Anderson 1984, 116, and Blanck 1992, 196. Castagnoli and Cozza 1956–1958, 141 were cautious since the archaeological evidence is slim, especially for the original Flavian-era building.

<sup>8</sup> Hanson 1998, 52.

 $<sup>^9</sup>$  Galen, *De antid.* 1.13 (14.65–66 Kühn). The point of reference of  $\dot{\epsilon}\xi$  αὐτοῦ in the first clause is not entirely clear. Peter Smith has pointed out to me that these words

<sup>&</sup>lt;sup>10</sup> The suggestion of the safety deposit box is Hanson's (personal correspondence, 18 December 1996).

<sup>&</sup>lt;sup>11</sup> De simplicium medicamentorum temperamentis ac facultatibus 4.14 (11.663 Kühn); De antid. 1.3 (14.19 Kühn).

De antid. 1.13 (14.64 Kühn). Here, as generally throughout, Galen calls Marcus Aurelius "Antoninus."

perfectly well distinguish between an ἀποθήκη and a library, as we learn from his famous set of anecdotes about the Alexandrian library: before books were ever put in the βιβλιοθήκαι, he says, they were stacked for a time in ἀποθήκαι. <sup>13</sup> ΄Αποθήκαι, in sum, were storage areas, more likely rooms than whole buildings. Were there such storage rooms on the Sacra Via? Yes, and they were right by the Templum Pacis, in the Horrea Piperataria, or Spice Warehouse, and I suggest that that is precisely where Galen's ἀποθήκη was. Consider the evidence:

- 1. A glance at figure 1 will reveal that the Horrea Piperataria (2 on fig. 1) were very close to the Sacra Via, just as Galen says his ἀποθήκη was. On the west, the Horrea seem to have been separated from the Templum Pacis only by the width of the Vicus ad Carinas, as indicated on figure 1.
- 2. We know from Dio that the ἀποθῆκαι in the Horrea Piperataria burned in the same fire that destroyed the Forum Pacis: πῦρ . . . ἐς τὸ Εἰρηναῖον ἐμπεσὸν τὰς ἀποθήκας τῶν τε Αἰγυπτίων καὶ τῶν ᾿Αραβίων φορτίων ἐπενείματο ("A fire fell upon the Temple of Peace and spread to the storerooms of Egyptian and Arabian wares"). ¹⁴ Thus any books and possessions Galen had here would have been consumed "when the whole Temple of Peace was burned," just as he says at *De comp. med. per gen.* 1.1.¹⁵
- 3. We know that imperial horrea might contain units that could be rented and used for storage by individuals. Roughly half of a *lex horreorum Caesaris*, announcing units for lease in imperial horrea and specifying the terms for their rental, survives. <sup>16</sup> It mentions *armaria* and *loca* (probably *loca armaris*; see below), and other rental units were clearly named in the lost section of the inscription. What the other units were can be inferred in part from a similar text, one that describes the *horrea privata* of Q. Tineius Sacerdos. <sup>17</sup> The units mentioned are *horrea, apothecae, compendiaria, armaria, intercolumnia*, and *loca armaris*. The units seem to be listed in order of decreasing size, and the second largest type of unit mentioned, *apotheca*, is the Latin equivalent of Galen's ἀποθήκη. <sup>18</sup>
- 4. Galen might well want a storage unit in what Dio calls the "storerooms of Egyptian and Arabian wares," for many ingredients in his medications came from Egypt, the Orient, or relatively exotic places within the empire. For example, of the first twenty ingredients Galen lists as components of the theriac he prepares for the emperor, at least five come from Egypt, Africa, or the East, 19 and five others—garlic from Crete, Illyrian iris, Pontic rhubarb, saffron, and opium—were certainly or probably imported

197-198.

<sup>&</sup>lt;sup>13</sup> Hippocratis Epidemiarum III et Galeni in illum Commentarius 2.4 (17.1.606–607 Kühn).

<sup>&</sup>lt;sup>14</sup> Cass. Dio 72.24.1.

<sup>&</sup>lt;sup>15</sup> Daguet-Gagey 1997, 61–63 reconstructs the course of the fire. Following a suggestion of R. Meneghini, she believes the fire began northwest of the Templum Pacis, somewhere near Trajan's Markets, then moved southeast and south, burning the Templum, the Horrea, and parts of the upper Forum and Palatine.

<sup>&</sup>lt;sup>16</sup> CIL 6.33747, from outside the Porta Salaria. Rickman 1971, 198–200 discusses the text and gives earlier bibliography.

<sup>&</sup>lt;sup>17</sup> CIL 6.33860. For a full discussion of this inscription and the storage units mentioned in it, see Rickman 1971,

<sup>&</sup>lt;sup>18</sup> We might assume that *apothecae*, as the second largest storage units after *horrea*, were whole rooms or small suites of rooms. *Horrea* and *intercolumnia* now have appeared also on some of the wax tablets from località Murecine near Pompeii: *Tabula Pompeiana Sulpiciorum*, Camodeca 1999, vol. 1, no. 45, p. 2, line 9; cf. vol. 1, no. 51, p. 5, lines 14–15 (plates of both tablets are in vol. 2).

<sup>&</sup>lt;sup>19</sup> The list is in *De antid*. 7 (14.42-43 Kühn). The five, in descending order by weight, are black pepper (from India, Miller 1969, 80–83), cinnamon (Arabia or East Africa, Raschke 1978, 652–655), the juice of the balsam tree (Miller 1969, 101–103), myrrh (Miller 1969, 104–105), and ζιγγίβερις (an Arabian plant, probably ginger, Miller 1969, 53–57).

into Italy.<sup>20</sup> We might well imagine Galen shopping for some of these items in the Horrea Piperataria and thus finding it convenient to have a storage space there.<sup>21</sup> Moreover, a building specifically designed for the storage of expensive dry goods would obviously be a good place for Galen to keep his supply of drugs and spices.<sup>22</sup>

In sum: Galen rented a storage unit in the warehouse on the Sacra Via or was provided with one by the emperor. Here he kept cinnamon, other ingredients for his drugs, and a copy of his own work *De compositione medicamentorum per genera*. There may have been other books as well. All of this was destroyed in the fire of 192. It is then clear that we cannot use Galen's references to his books as evidence for either the location or the contents of the Templum Pacis library.<sup>23</sup> On the other hand, we get for the first time a glimpse (not quite certain, but very likely) of how an individual might use a rental storage unit in the horrea, and armed with this new information we may briefly consider two further matters.

Were Any of Galen's Works in Public Libraries in Rome? Although Galen's reference to his work De compositione medicamentorum per genera cannot be taken as showing that that particular work was in the library of the Temple of Peace, it would be very surprising if none of Galen's works were to be found in that or in one or more of the other public libraries of Rome. Authors often gave presentation copies of their works to the libraries—or to the emperors, whence they might find their way into the public libraries.<sup>24</sup> Galen himself was close to the imperial family,<sup>25</sup> and one would expect him to make such a gift. He certainly thought that the works of other medical writers would be available in the libraries, since we find him searching there for the works of Hippocrates and Archigenes,<sup>26</sup> and we might therefore expect him to make sure that copies of his own works would be available as well.

We have, moreover, two further passages in *De libris propriis* that refer to books of his that were lost in the fire of 192. At *De libr. propr.* 2 (19.19 Kühn), Galen tells us in summary

 $^{20}$  Miller 1969, 110–118 (table of spices that grew within the empire).

<sup>21</sup> For the possibility of merchants in the horrea, see Rickman 1971, 106.

<sup>22</sup> We do not know much about the physical structure of the building. Piranomonte 1996, 45-46, and Rickman 1971, 104-106, give an account of the scanty physical remains and provide earlier bibliography. The horrea seem to have been organized in groups of rooms arranged around open courts, with many water tanks (no doubt protection against the pepper and other spices, as Rickman noted). Recent excavations on the opposite (south) side of the Via Sacra have revealed a warehouse that seems to be similar in plan, and reconstructed elevations and sections of it may give an idea of what Galen's warehouse was like. For these, see Papi 1996, 49-50 with figs. 33 and 34 on p. 399. Finally, note that the name we now use for this structure, Horrea Piperataria, is late, known from the Chronographus anni 354, Jerome, and other late sources. Galen and Dio both use more descriptive names: the "storeroom on the Sacra Via" (Galen De comp. med. per gen. 1.1 [13.362 Kühn]) and the "storerooms of Egyptian and Arabian wares" (Cass. Dio 72.24.1). Pepper may have been the most

important item that was bought and sold here, at least by weight, but Dio's name for the structure shows that there were many others too.

<sup>23</sup> It is, of course, possible that this library, or part of it, was housed in the hall that eventually became the Church of Saints Cosmas and Damian. As noted above, however, we have at present very little information concerning the shape or interior design of this or the other rooms in the Templum Pacis, and a positive identification of the room as a library is not possible at this time. Perhaps the ongoing investigations in the area of the imperial fora will provide conclusive evidence.

<sup>24</sup> So, for example, Hor. *Epist.* 1.13 (presentation of the *Odes*), Ov. *Tr.* 3.1.67–72 (the *locus classicus* for entry into the public libraries), Mart. 12.2 (3) (sending a book from Spain to the emperor for inclusion in some collection).

<sup>25</sup> This emerges very clearly from such passages as those gathered in Moraux 1985, 131–139.

<sup>26</sup> In Hipp. Epid. Libr. VI Comm. 4.22 (Wenkebach and Pfaff 1956, 233) for Hippocrates; De locis affectis 3.5 (8.148 Kühn) for Archigenes.

fashion about the things he wrote while in Rome in the years from 170 on. Most of these, he says, had been destroyed in the fire. Later in the same work, while discussing another group of his writings, Galen tells us that some had been burned but that he had given copies of some to friends, and in that and other ways they had survived.<sup>27</sup> In both of these passages it is not clear where the books were when they burned: were they in the library of the Templum Pacis, or were they in Galen's storeroom in the Horrea Piperataria? In the first case, it might seem most likely that works written in the 170s would, by 192, be published and in the libraries rather than squirreled away among Galen's papers and cinnamon. On the other hand, both passages seem to refer to informal compositions,<sup>28</sup> and Galen elsewhere tells us that he sometimes wrote more for himself and for his students than for publication.<sup>29</sup> While this claim may be something of a pose, it is clear that Galen had private copies of some of his works, and he might have kept them in his storage space. It is possible, then, that both of these passages refer to books in the same  $\dot{\alpha}\pi o\theta \dot{\eta}\kappa \eta$  that Galen refers to in *De compositione medicamentorum per genera*.<sup>30</sup>

Galen Goes Shopping. At many points in De antidotis Galen tells his reader how to assess the quality of various herbs and spices. While most of this material could be derived from earlier writers on pharmacology, some of it seems to come from Galen's own experience. He tells us, for example, that you develop your ability to distinguish between the varieties and qualities of a given plant by looking carefully at many samples. He says, as though he had seen them, that huge quantities of iris were imported from Libya but that iris from Illyria was superior. We find Galen himself searching for the best cinnamon he can find, looking in wooden containers stored in a warehouse (ἀποθήκαι), and browsing for and choosing honey in the "imperial warehouse" (αὐτοκρατορικαὶ ἀποθήκαι). The cinnamon, we might well assume, was to be found within the Horrea Piperataria. Honey, however, was not an exotic spice, and perhaps it was for sale in one of the other nearby horrea that had replaced the old general market (macellum) when the Templum Pacis was built. It does not seem unreasonable to imagine Galen shopping in the Horrea Piperataria and other nearby and less exotic markets, then returning with his spices, herbs, and other items to his ἀποθήκη in the Piperataria, where he could prepare his theriac and other compound medications, consulting his own books if necessary.

books were in one of the libraries on the Palatine (the Apollo or the Domus Tiberiana libraries), since Galen tells us, in the passage we began with, that the same fire destroyed the libraries on the Palatine.

<sup>&</sup>lt;sup>27</sup> *De libr. propr.* 11 (19.41 Kühn). My thanks to Professor Hanson for calling these two passages to my attention.

<sup>&</sup>lt;sup>28</sup> In both cases Galen states that he wrote to keep himself busy (γυμνάζων  $\dot{\epsilon}$ μαυτόν) and does not specify the works involved.

<sup>&</sup>lt;sup>29</sup> De libr. propr. prooem. (19.10 Kühn). This passage is discussed by Boudon 1994, 1431–1433 and by Hanson 1998, 28–30.

<sup>&</sup>lt;sup>30</sup> Even if this is not the case, and these books *were* in the Templum Pacis library when it burned, we still learn nothing about the location of that library within the Templum Pacis, since Galen does not in these passages provide any topographical information. Another possibility, suggested by the reader for *MAAR*, is that these

<sup>31</sup> De antid. 1.12 (14.60 Kühn).

<sup>32</sup> De antid. 1.12 (14.59-60 Kühn).

<sup>&</sup>lt;sup>33</sup> Cinnamon: *De antid*. 1.13 (14.64 Kühn); honey: *De antid*. 1.4 (14.26 Kühn).

<sup>&</sup>lt;sup>34</sup> For the *macellum* and its relation to the Templum Pacis, see Anderson 1984, 103. Papi 1996, 49 notes that the Horrea Vespasiani, on the north slope of the Palatine, were perhaps made necessary by the destruction of the *macellum*.

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